The beak is somewhat eroded but the rest of the exterior of the shell is in good condition and most of the periostracum is well preserved. Internally the shell is rather fine, the nacre being silvery and iridescent. The cardinal and lateral teeth as might be expected are massive, the muscular scars and pallial line are deeply impressed.

Doubtless the shell was at about the limit of size attainable to this species but there is nothing about the shell itself (other than its great size) to indicate that there will be no further growth. Apparently the shell-secreting organs of the animal were in full vigor and in readiness to perform their function

should further growth of the animal require enlarged accomodations. It seems probable, too, that the secretion of calcareous matter was still going on and that if the animal had been permitted to live there would have been a further thickening.

The specimen is Cat. No. 346631, U.S. N. M.

NOTE ON FENELLA A. ADAMS

BY WM. H. DALL

Fenella (originally spelled Finella by a typographical error) was described by Adams in 1860 and has suffered many vicissitudes. The species have been referred to the Rissoidae, Pyramidellidae, Cerithiidae, and Litiopidae. Carpenter made the error of identifying West American species with Mesalia, Styliferina, and Alvania, and a species of Halistylus with Fenella, which, as well as Adams' typical species, is figured by Tryon in his Manual.

The fortunate discovery in the collection of the National Museum of specimens of Adams' typical species received directly from him many years ago, has enabled me to positively identify Fenella with Alabina described by me in 1902. It has a normal protoconch of about three smooth brown turbinate whorls which definitely removes it from the Pyramidellidae. The data given by Fischer about the animal might apply to a Bittium or a Rissoid, but from an examination of dried specimens I have

been able to determine that the operculum is multispiral and circular, which definitely removes it from the Rissoidae. Dried Japanese and Hawaiian specimens were tested for the radula without success but finally a specimen of Alabina diomedae Bartsch from California yielded the desired item, which proved to resemble the radular structure of Lampania, as figured by Troschel in Das Gebiss der Schnecken. This definitely settles the Cerithioid relations of the genus, which may find a place near Bittium in the general system, as I placed it in my summary of the Marine Mollusks of the Northwest Coast of America.

AN ABNORMAL SHELL OF MYA ARENARIA

BY EDWARD S. MORSE

The many deformations in the shells of Mollusca have often been described and figured and their causes easily explained. Some of these deformations have been due to injuries to the shell in its early stages, others are due to an arrest of development-atrophy, or an access of growth-hypertrophy, as are the usual causes of malformations among the higher animals and man. In shells these malformations generally consist in the case of gasteropods of the whorls being separated, elongation of the spire, extra knobs, spines, ribs or keels or simple monstrosities; reversed twirls of the spire in dextral shells, supernumerary teeth in the aperture. These and other modifications of the shell are readily understood. I now present an example of an abnormal growth which has so far been inexplicable to me, and it is hoped that some reader of the Nautilus will solve the problem. Recently I received the right valve of the common clam, Mya arenaria, from my friend Major John M. Gould, who received it from Levi C. Carter of Loudville, Maine, who got it at Marsh Island, midway between the Kennebec and Penobscot Rivers.

On the anterior portion of the shell a conspicuous raised flattened rib appears which starts near the beak and continually widens with the growth of the shell, and at the margin projects